UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,517	11/05/2004	Michael Junge Pedersen	P15145-US1	6634

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EXAMINER
THOMPSON, JR, OTIS L

ART UNIT	PAPER NUMBER
4183	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>14 July 2004</u>.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-27 and 30-41</u> is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1,3,5,6,9,11,13-27,30,32,34,35,38 and 40</u> is/are rejected.
7) ☒ Claim(s) <u>2,4,7,8,10,12,31,33,36,37,39 and 41</u> is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>14 July 2004</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a) ☒ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date <u>07/14/2004</u>.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 3, 6, 9, 11, 13, 19, 20, 23, 27, 32, 35 , 38, and 40 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Claims 14-18, 21, 22, and 24-26 are also rejected because they directly or indirectly depend on claim 13 and include the limitations thereof.

3.   Regarding claims 3 and 32, the phrase "other real time applications or services" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "other"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). For the purposes of prosecution, Examiner interprets the scope of this claim as including packages of voice and/or video.

4.   Claims 3 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "QoS-values for packages loss ratio..." is unclear.

5.   Regarding claims 6, 20, and 35, the phrase "other criteria" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "other"), thereby rendering the scope of the claim(s) unascertainable.

See MPEP § 2173.05(d). For the purposes of prosecution, Examiner interprets the scope of this claim as including port, MAC-address, IP-address, or session-ID.

6.   Claims 9 and 38 recite the limitations "the declining of the minimum value (m) was detected". There is insufficient antecedent basis for this limitation in the claims.

7.   Claims 11 and 40 recite the limitations "the filter deactivation threshold value (F_d)" and "the minimum value (m)". There is insufficient antecedent basis for this limitation in the claims. For the purposes of prosecution, Examiner treats claim 11 as being dependent on claim 4 and claim 40 as being dependent on claim 33.

8.   Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "acquisition means and comparing means of a monitoring means" is unclear.

9.   Claim 19 recites the limitation "declines the deactivation threshold value (F_d)". There is insufficient antecedent basis for this limitation in the claim.

10.   Claim 23 recites the limitation "the second comparing means". There is insufficient antecedent basis for this limitation in the claim.

11.   Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "Q_n for packages loss" is unclear.

12.   Regarding claim 27 the phrase "other transfer protocol suitable for" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "other"), thereby rendering the scope of the claim(s) unascertainable.

See MPEP § 2173.05(d). For the purposes of prosecution, Examiner interprets the scope of this claim as including FTP file transfer or TFTP file transfer.

Claim Rejections - 35 USC § 102

13.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14.   Claims 1, 6, 13, 20, 25, 26, 30, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Flanagan et al. (US 2002/0105909).

15.   **Regarding claims 1, 13, and 30,** Flanagan et al. discloses *acquiring Quality of Service information carried in the RTP/RTCP data packages* (Paragraph 0029, see "RTCP gathers...and the QoS Monitor..."); *comparing at least one QoS value Q_n to a corresponding QoS acceptance ratio, wherein each Q_n is based on the Quality of Service information from the RTP/RTCP data packages; and filtering when at least one QoS value has an unacceptable level to said corresponding QoS acceptance ratio* (Paragraph 0027, see "value [packet loss value calculated; Paragraph 0026, see "computation of smoothed percent packet loss..."] [i.e. QoS value, Q_n] exceeds a threshold [i.e. comparing Q_n to QoS ratio and Q_n unacceptable]), a QoS Monitor...routes calls over an alternative network [i.e. filtering]..."). The QoS Monitor method disclosed in Flanagan et al. is a computer program (Paragraph 0027, see "The QoS Monitor is a

computer..."). Flannagan et al. is also a system in which the QoS Monitor method and program are performed (Paragraph 0004, see "The system collects...").

16.   **Regarding claims 6, 20, and 35,** Flanagan et al. discloses *filtering adaptively the total IP data throughput stream depending on port, MAC-address, IP-address, or session-ID* (Abstract, see "IP network...", i.e. routing [filtering] done adaptively according to IP address).

17.   **Regarding claim 25,** Flanagan et al. discloses *a gateway* (Paragraph 0014, see "Gateways 108A-108D are interfaces...").

18.   **Regarding claim 26,** Flanagan et al. discloses *monitoring means for monitoring the total IP data throughput on the switch based aggregation system* (Paragraph 0029, see "RTCP gathers...and the QoS Monitor [i.e. monitoring means]..."), *filtering means being capable of filtering the total IP data throughput* (Paragraph 0026, see "computation of smoothed percent packet loss..."] [i.e. QoS value, Q_n] exceeds a threshold [i.e. comparing Q_n to QoS ratio and Q_n unacceptable]), a QoS Monitor [i.e. filtering means]...routes calls over an alternative network [i.e. filtering]..."), *and the controlling means for controlling said filtering means depending on the monitoring of the total IP data throughput on the switch based aggregation system* (Paragraph 0027, see "value [packet loss value calculated]; Paragraph 0026, see "computation of smoothed percent packet loss..."] exceeds a threshold [i.e. controlling means for controlling filtering depending on the monitoring]), a QoS Monitor...routes calls over an alternative network..."), *and filter criteria* (Abstract, see "IP network...", i.e. routing [filtering] done adaptively according to IP address [i.e. filter criteria]), *said all means and filter criteria may be implemented as a computer program and computer readable*

coded stored on a computer readable product on in a computer readable storage for processing (Paragraph 0027, see "The QoS monitor is a computer program implemented in...").

Claim Rejections - 35 USC § 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20.   Claims 3 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan et al. (US 2002/0105909 A1) as applied to claim 1 above, and further in view of Schuster et al. (US 6,363,053 B1).

21.   Flanagan et al. discloses the claimed invention above as well as *acquiring QoS values carried by the passing RTP/RTCP data packages of voice and/or video* (Abstract, see "voice-over-internet-protocol calls..."; Paragraph 0012, see "audio, video, and data...") but fails to specifically disclose *comparing the QoS values for packages loss ratio, jitter ratio, and/or maximum delay with corresponding QoS acceptance ratio.*

However, Schuster et al. discloses *comparing the QoS values for packages loss ratio, jitter ratio, and/or maximum delay with corresponding QoS acceptance ratio* (Column 13 lines 16-22, see "packet loss, throughput, jitter, and latency [i.e. delay]..."; Column 13 lines 25-29, see "QoS...identified...are compared to QoS..."). This method

enables a user to select a least costly service level satisfying the QoS requirements for a particular application (Column 3 lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to incorporate the teachings of Schuster et al. into Flanagan et al. in order to allow a user to select a least costly service level satisfying the QoS requirements for a particular application.

22.   Claims 5 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan et al. (US 2002/0105909 A1) as applied to claims 1 and 30 respectively above, and further in view of Riggan et al. (US 6,490,252 B1).

23.   Flanagan et al. discloses the claimed invention above but fails to specifically disclose that *filtering is stopped, if at least one of the QoS values is acceptable*.

However, Riggan et al. discloses a method for prevention of cell loss due to quality of service contracts in an ATM network, in which voice traffic, after being routed on an alternate network, is routed back through an ATM network (i.e. *filtering is stopped*) when the bandwidth utilization of the ATM network falls below the QoS threshold level (i.e. *QoS value is acceptable*) (Column 1 lines 66-67 – Column 2 lines 1-4). This method ensures cell integrity at optimal costs for QoS traffic contracts (Column 1 lines 46-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to incorporate the teachings of Riggan et al. into Flanagan et al. in order to ensure cell (i.e. packet) integrity at optimal costs for QoS traffic contracts.

Allowable Subject Matter

24.   Claims 2, 4, 7, 8, 10, 12, 31, 33, 36, 37, 39, and 41 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OTIS L. THOMPSON, JR whose telephone number is (571)270-1953. The examiner can normally be reached on Monday to Thursday 7:30 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4183

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Otis L Thompson, Jr./
Examiner, Art Unit 4183

March 5, 2008

/Len   Tran/

Supervisory Patent Examiner, Art Unit 4183